



STATE OF LOUISIANA  
DEPARTMENT OF HEALTH AND HOSPITALS

# COMMUNICABLE DISEASES IN SCHOOL SETTINGS:

## *ESSENTIAL GUIDELINES FOR SCHOOL NURSES AND PERSONNEL*

Louisiana Office of Public Health - Infectious Disease Epidemiology Section  
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<http://www.oph.dhh.state.la.us/infectiousdisease/index.html>

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## INFECTIOUS DISEASES IN SCHOOLS

The spread of infectious diseases is a concern in schools and child care centers due to the close proximity of children and adults.

Infectious diseases may be caused by numerous different organisms (infectious agents) such as bacteria, viruses, fungi and parasites.

To determine the likelihood that infection in one or more students will pose a risk for others, a school nurse should have an understanding of the following:

- The mechanism by which an agent is spread (*transmission route*)
- The ease with which an agent is spread (*contagion*)
- The likelihood that other students are immune (either due to immunization or prior infection)

These guidelines address some infectious diseases often seen in school settings. Most cases of illness are **sporadic**, but occasionally an **outbreak** of a particular disease can occur in a school. **Suspected outbreaks and cases of reportable communicable diseases should be reported to the state or local public health agency immediately.**

For detailed information on reportable diseases/conditions and reporting requirements by Class refer to:

<http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease%20list%202.pdf>

The guidelines are based on current (May, 2005) health information. Recommendations for handling infectious disease issues in schools may change as new information becomes available. The Infectious Disease Epidemiology Program at the Louisiana Office of Public Health is available to assist school nurses and personnel when infectious disease issues arise and can be reached at (504) 568-5005 or 1-800- 256-2748.

Disease control guidelines for immunocompromised or developmentally disabled children may be different than the guidelines presented in this document. When a developmentally disabled or immunocompromised student has an infectious disease or is exposed to another student with an infectious disease, the school nurse or other health care provider should be consulted. The state or the local public health agency is also available for consultation.

An electronic downloadable version of “**COMMUNICABLE DISEASES IN SCHOOL SETTINGS: ESSENTIAL GUIDELINES FOR SCHOOL NURSES**” can be accessed on the LA OPH website at <http://www.oph.dhh.louisiana.gov/infectiousdisease/index.html>.

## WHEN A COMMUNICABLE DISEASE IS DIAGNOSED OR SUSPECTED

- As soon as possible *separate* the ill child from well children at the facility until he/she can be relocated (taken to either home or hospital).
- *Notify* parents/guardians immediately so that medical advice and treatment can be sought.
- *Adhere* to the exclusion and readmission recommendations provided in the guidelines.
- *Inform* parents/guardians of exposed children about the illness as necessary. Advise parents/guardians to watch their children for signs and symptoms of the disease.
- *Closely observe* the appearance and behavior of exposed children and *be alert* to the onset of disease.
- *Implement* important strategies to prevent spread of communicable diseases and utilize a sanitizing procedure:
  - Immediately wash, rinse, and sanitize any object or surface that has been soiled with discharge (such as nasal discharge or feces). Sanitize diaper-changing tables, toilets and potty chairs after each use (for detailed information refer to *Sample Cleaning and Sanitizing Chart*; page 16).
  - Encourage staff and children to take extra precautions with handwashing, foodhandling, dishwashing and general cleanliness.

## **EXCLUSION GUIDELINES**

School attendance is important for students; therefore, unnecessary barriers to attending school should be minimized. Exclusion of ill students (and adults) from school settings is to be considered when such exclusion can reduce spread of disease and the likelihood of secondary cases.

The decision to exclude students with an infectious disease from school should be made in conjunction with the school nurse, the state or local public health agency, health care professionals and/or parents/guardians. These guidelines contain exclusion recommendations for most infectious diseases commonly occurring in school settings.

Students should be allowed to return to school once the exclusion period is met, or a health care provider clears the student.

General conditions for exclusion of children from the school setting are as following:

- The student has a high fever, behavior changes, lack of energy, lethargy, persistent crying, difficulty breathing, diarrhea or stools with blood or high quantity of mucus, vomiting more than 2 times within 24 hours, uncontrolled coughing or other signs or symptoms that may indicate a severe illness.
- The student is not able to participate comfortably in regular activities due to his/her illness.
- The student requires more care than staff of the school are able to provide without compromising health and safety of other students.
- The student is ill with a potentially contagious illness and exclusion is recommended by the state or local public health agency or a health care provider.

In cases where unvaccinated students are exposed to a vaccine preventable disease (such as measles, mumps, rubella and pertussis), the state or local public health agency should be consulted in order to determine if exclusion of unvaccinated students is necessary.

Occasionally school personnel become ill with an infectious disease. When this occurs, the affected staff member should consult with the school nurse, school administration, the state or local public health agency and/or a health care provider to determine if he/she is allowed to work. If ill with diarrhea or vomiting, school personnel should not work until the illness is over. This is especially important for staff that work in the cafeteria or handle food in any manner.

## REPORTING REQUIREMENTS

Louisiana law requires persons treating or having knowledge of a reportable disease, whether the disease is suspected or confirmed, to report the case to the state or local public health agency. Health care providers or laboratories report diseases in most cases. Under certain circumstances, such as when a student is **suspected** of having measles, chickenpox and a serious infectious disease or when **an outbreak occurs**, school nurses and personnel must report the event immediately.

The list of reportable diseases and conditions in Louisiana is available at:

<http://www.oph.dhh.state.la.us/infectiousdisease/reportdisease/index.html>

**To report a disease or outbreak, call 24/7 the Infectious Disease Epidemiology Section  
Telephone: (504) 568-5005 or 1-800-256-2748**

Regarding confidentiality, the Family Rights and Privacy Act and Health Insurance Portability and Accountability Act (HIPAA) prohibit sharing of health-related information except in certain well-defined circumstances, including, but not limited to: specified officials for audit or evaluation purposes and appropriate officials in cases of health and safety emergencies. Notifying the state or local public health agency of a reportable disease does not breach confidentiality laws.

When a case is reported, public health agencies may conduct an investigation to confirm the diagnosis, treatment and cause of the illness, determine and implement the appropriate methods of disease control.

**Group outbreaks resulting from any cause, including foodborne outbreaks, must be reported to the state or local public health agency within 24 hours.**

In an outbreak situation, the goal of the public health agency is to assist the school in preventing further spread of the illness and to try to determine the cause of the outbreak.

**To the extent it is available, the following information should be reported:**

- **diagnosis**
- **patient's name**
- **date of birth**
- **sex**
- **race, ethnicity**
- **address and phone number of the person with a communicable disease**
- **name, address and contact info (phone numbers, fax, e-mail) of the responsible health care provider**
- **pertinent laboratory test results (if applicable).**

## ROUTES OF TRANSMISSION OF COMMUNICABLE DISEASES

Infectious diseases can be spread in a variety of ways, referred to as ***transmission routes***.

### DROPLET TRANSMISSION / INFECTIOUS DISCHARGES

Diseases with *respiratory tract* symptoms (runny nose, cough, sore throat) are often spread by droplets containing viruses or bacteria or through surfaces/items contaminated with nose/throat discharges.

Droplets are generated during coughing, sneezing, or talking. These “large” droplets travel less than three feet before falling to the ground and do not remain suspended in the air. Before falling to the ground, droplets may be deposited on the mucous membranes of the eye, nose, or mouth of another person within three feet, resulting in disease transmission. In addition, sick people will often contaminate their hands and other objects with infectious nose/throat discharges. When other persons come in contact with these objects and then touch their eyes, mouth, or nose, they can become infected. This type of transmission route is common in school settings.

Some of the infections passed in this way are the common cold, influenza, meningitis (viral and bacterial), mumps, rubella, pink eye (conjunctivitis), strep throat and whooping cough (pertussis).

### AIRBORNE TRANSMISSION

This mode of transmission is rare and only a few diseases are spread by this route (chickenpox, measles, tuberculosis). Chickenpox and measles can also be transmitted by droplet transmission route. *Airborne* transmission occurs when an infected person coughs, sneezes, or talks and generates very small respiratory particles (*droplet nuclei*) containing virus or bacteria. These small particles remain suspended in the air for long periods and can be widely dispersed by air currents. When another person inhales these small particles, he/she will be infected and potentially become ill.

### CONTACT TRANSMISSION

Contact transmission includes ***fecal oral transmission, direct skin transmission and blood and body fluids transmission*** described below.

#### FECAL↔ORAL

Intestinal tract infections are often spread through *oral ingestion* of viruses, bacteria, fungi or parasites found in the stool of an infected person or animal. This type of transmission happens when objects contaminated with microscopic amounts of human or animal feces are placed in the mouth. In school settings, the sites most frequently contaminated with feces are hands, classroom floors, faucet handles, toilet flush handles, toys and tabletops. Fecal-oral transmission can also occur when food or water contaminated with microscopic amounts of human or animal feces is ingested. Organisms spread by this transmission route include: *Campylobacter*, *Cryptosporidium*, *E. coli* O157:H7, *Giardia*, hepatitis A and E virus, *Salmonella*, *Shigella* and a number of intestinal viruses. Other infections like “hand, foot and mouth disease”, poliovirus infection and viral meningitis can also be spread through the stool of an infected person.

### **DIRECT SKIN/MUCOSAL CONTACT**

Some infections can be spread directly by skin-to-skin contact or indirectly by contact with contaminated surfaces like clothing. Body (head and pubic) lice and scabies can be spread by direct contact with an infected person (person-to-person contact). In addition, head lice can be transmitted through combs, hair brushes, hats and hair ornaments.

Shingles (*Herpes zoster*), impetigo, ringworm and, in some cases, chickenpox (varicella) and rabies are also spread this way.

### **BLOOD / BODY SECRETIONS CONTACT**

Some infections are transmitted when an infected person's blood or other body secretions (such as internal fluids, seminal and cervical fluids) come in contact with the damaged skin or mucous membrane. This type of transmission is very rare in school settings.

Diseases such as hepatitis B, hepatitis C and the human immunodeficiency virus (HIV) can be spread by contact with infected blood. Infected students can possibly transmit these infections through biting if there is visible blood mixed with their saliva (i.e. from bleeding gums). CMV (cytomegalovirus) can be spread by body secretions like urine and saliva and mononucleosis can be spread by saliva.

Some of the other modes of transmission of little importance in the school settings are:

### **VECTOR-BORNE**

There are some diseases which are commonly transmitted to humans through vectors (by insects or other animals). These diseases are usually called "Vector-borne diseases".

**"Vector"** is a term used broadly to refer to any animal or arthropod (insect, tick, mosquito, etc.) that transmits human disease or plays an essential role in the disease agent's life cycle. Generally, a vector becomes infected with a disease-causing virus, rickettsia, bacterium or parasite and then transmits that agent to a human or other animal.

Anopheline mosquitoes of malaria, snail hosts of schistosomiasis, sand flies of leishmaniasis, or mosquitoes of West Nile virus infection are all examples of vectors.



# IMPORTANT STRATEGIES TO PREVENT SPREAD OF COMMUNICABLE DISEASES IN SCHOOLS

## **PREVENTION: HAND HYGIENE**

### **HANDWASHING**

Good hand hygiene is the most effective way to stop the spread of illness-causing germs. Handwashing is one of the best tools for controlling the spread of infections. All students and staff should perform effective handwashing, which will reduce the amount of illness in schools.

### ***HANDWASHING TECHNIQUE***

- Wash hands for at least **10-15 SECONDS**.
- Use **SOAP** and warm **RUNNING WATER**.
- **RUB** hands vigorously as you wash them.
- **WASH ALL** surfaces including the backs of hands, wrists, between fingers and under fingernails.
- **RINSE** hands well.
- **DRY** hands with a paper towel or air dryer.
- If using paper towels, turn off the water using a **PAPER TOWEL** instead of bare hands.

State health regulations for schools require that soap and paper towels or air dryers are available for all bathroom facilities. Schools often have a problem keeping the restrooms stocked with soap and paper towels due to students playing with the items and clogging toilets or making messes. Removing soap and paper towels from the restrooms in schools as a solution of the problem is strongly discouraged. Schools should try to find alternate solutions to these problems.

### ***WHEN TO WASH YOUR HANDS***

- Upon arrival for the day or when moving from one child care group to another
- After coughing, sneezing, wiping your nose and cleaning up messes
- After using the toilet
- Before and after providing this type of care to another person
- After cleaning potentially contaminated surfaces
- Before eating or drinking
- After handling animals
- Whenever hands are dirty
- Food handlers should wash hands before handling food and when hands are soiled
- Students who are unable to wash their own hands should have assistance from staff

### ***USE OF ALCOHOL-BASED HAND RUBS***

Sanitizing alcohol-based hand rubs (liquid, gel or foam hand sanitizers) have increased in popularity as they can provide an effective and convenient alternate solution to hand hygiene in school. Instant alcohol-based sanitizing hand rubs can be used during the day, if it is more convenient and hands are free of any visible soil.

### ***TEACHING HANDWASHING***

Children often learn by watching adults. Especially young children cannot wash their hands properly. Therefore, it is important for school personnel to know and utilize good handwashing techniques. This will ensure that they can show students the proper techniques in addition to verbal instructions.

**Always remind students and staff that handwashing will stop the spread of pathogenic germs which might cause illness.**

### **PREVENTION: RESPIRATORY HYGIENE**

- Respiratory diseases can be spread from coughs or sneezes. Make sure tissues are available in all classrooms. Students and staff should cover their mouths when coughing and use a tissue when sneezing or blowing their noses. Tissues should be thrown away immediately and then proper hand washing should be exercised. Alcohol hand gels may be used in the classrooms to minimize disruption.
- Any employee, student, teacher, or staff member suspected of having a respiratory disease should not attend school. Ill students must be excluded from sports activities, choir or any activities that may involve close contact, since transmission of a respiratory disease may be easier in these situations. All students and staff should avoid sharing glasses, water bottles, drinks, spoons/forks etc.
- School buses, because of the enclosed space, may allow for easy spread of the respiratory disease. Tissues should be available on the buses and students should be encouraged to cover nose and mouth while coughing or sneezing. If possible, commonly handled interior surfaces (i.e. door handles, hand rails, etc.) between loads of students should be disinfected.
- In the school, commonly used surfaces such as door handles, handrails, eating surfaces, desks, etc., should be cleaned frequently with disinfectant (bleach solutions or commercial disinfectants are appropriate.)
- Because of the risk of developing Reye's syndrome, do NOT give aspirin or salicylate containing medicines to a child or teenager who has an acute respiratory disease.

**Always remind students and staff to:**

1. **Cover their nose and mouth** with a tissue when they cough or sneeze—have them throw the tissue away after they use it.
2. **Wash their hands often with soap and water**, especially after they cough or sneeze. If water is not near, use an alcohol-based hand cleaner.
3. **Remind them not to touch their eyes, nose or mouth.** Germs often spread this way.

## **PREVENTION: IMMUNIZATIONS**

### ***CHILDHOOD IMMUNIZATIONS***

Immunizations help prevent serious illnesses. State health regulations require students attending out-of-home school settings to be up to date on all immunizations or have a valid exemption (either a medical, religious or personal exemption).

Required immunizations include: diphtheria, tetanus, pertussis (whooping cough), polio, measles, mumps, rubella, varicella (chickenpox), *Haemophilus influenzae type b* infection, *Streptococcus pneumoniae* (pneumococcal) infection and hepatitis B. Hepatitis A, influenza (flu) and bacterial meningitis vaccines are available but not required for school attendance.

Schools should have documentation of the immunization status of all students on file. Information on immunization requirements can be found at the following website: <http://www.oph.dhh.louisiana.gov/immunization/index.html>

Staff and students (especially those with medical conditions and anyone else who wants to lower their risk of getting the flu), should get the flu shot.

### ***ADULT IMMUNIZATIONS***

It is strongly recommended that school personnel be vaccinated (or show laboratory evidence of immunity) against diphtheria, tetanus, mumps, measles, polio, chickenpox (varicella) and rubella (German measles). It is especially important for women of childbearing age to be immune to rubella as this infection can cause complications for the developing fetus.

**The immunization schedule can be found at:**

<http://www.oph.dhh.louisiana.gov/immunization>

## PREVENTION: FOOD SAFETY



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Food borne illness is considered to be any illness that is related to food ingestion. Gastrointestinal tract symptoms (abdominal cramps and/or pain, nausea, vomiting, diarrhea) are the most common clinical manifestations of foodborne illnesses. As many different disease-causing microbes, or pathogens, can contaminate foods, there are many different foodborne infections. In addition, poisonous chemicals, or other harmful substances can cause foodborne diseases if they are present in food.

Food borne illness is a serious public health problem. As of today more than 250 different foodborne diseases have been described. The Centers for Disease Control and Prevention (CDC) estimates that each year 76 million people get sick, more than 300,000 are hospitalized and 5,000 die as a result of foodborne illnesses (4). In addition to human suffering, an outbreak of foodborne illness can result in a damaged reputation and financial loss to the institution where the outbreak occurred.

When a pathogen enters the body through the gastrointestinal tract (*fecal-oral* route of transmission), it often causes the first symptoms in that area. Therefore, nausea, vomiting, abdominal cramps and diarrhea are common symptoms in many foodborne diseases.

**Food safety is the responsibility of every person who is involved in foodservice.** Every action in foodservice has the potential to impact the safety of the food, either during purchasing, transportation, storage, preparation, holding, service or cleanup. Foodborne illness could occur in any operation. To prevent a foodborne illness, good food safety habits should be maintained on a routine basis.

The **Food Service Cleaning Sample Schedule** is shown in the chart below:

### Sample Food Service Cleaning Schedule

| Task                                   |                |                           |                       | Frequency |              | Comments   |
|--|----------------|---------------------------|-----------------------|-----------|--------------|--|
|  | After Each Use | Before and After Each Use | Daily                 | Weekly    | As Necessary |  |
| <b><i>RANGE</i></b>                    |                |                           |                       |           |              |  |
| Clean grill and grease pans            | Yes            |                           |                       |           |              |  |
| Clean burners                          | Yes            |                           |                       |           |              |  |
| Clean outside                          |                |                           | Yes                   |           |              |  |
| Wipe out oven                          |                |                           |                       | Yes       |              |  |
| Clean edges around hood                |                |                           |                       | Yes       |              |  |
| Clean hood screening and grease trap   |                |                           |                       | Yes       |              |  |
| <b><i>REFRIGERATOR AND FREEZER</i></b> |                |                           |                       |           |              |  |
| Defrost freezer and clean shelves      |                |                           |                       |           | Yes          | When more than ¼ - inch frost develops or temperature exceeds 0° F |
| Wipe outside                           |                |                           | Yes                   |           |              |  |
| Dust top                               |                |                           |                       | Yes       |              |  |
| Clean inside shelves in order          |                |                           |                       | Yes       |              |  |
| <b><i>MIXER AND CAN OPENER</i></b>     |                |                           |                       |           |              |  |
| Clean mixer base and attachments       | Yes            |                           |                       |           |              |  |
| Clean and wipe can opener blade        | Yes            |                           |                       |           |              |  |
| <b><i>WORK SURFACES</i></b>            |                |                           |                       |           |              |  |
| Clean and sanitize                     |                | Yes                       |                       |           |              |  |
| Organize for neatness                  |                |                           | Yes                   |           |              |  |
| <b><i>WALLS AND WINDOWS</i></b>        |                |                           |                       |           |              |  |
| Wipe if splattered or greasy           |                |                           |                       |           | Yes          |  |
| Wipe window sills                      |                |                           |                       |           | Yes          |  |
| Wipe window screens                    |                |                           |                       |           | Yes          |  |
| <b><i>SINKS</i></b>                    |                |                           |                       |           |              |  |
| Keep clean                             | Yes            |                           |                       |           |              |  |
| Scrub                                  |                |                           | Yes                   |           |              |  |
| <b><i>CARTS (if applicable)</i></b>    |                |                           |                       |           |              |  |
| Wipe down                              | Yes            |                           |                       |           |              |  |
| Sanitize                               |                |                           | Yes                   |           |              |  |
| <b><i>GARBAGE</i></b>                  |                |                           |                       |           |              |  |
| Take out                               |                |                           | Yes                   |           |              | More often as needed   |
| Clean can                              |                |                           |                       |           | Yes          |  |
| <b><i>TABLES AND CHAIRS</i></b>        |                |                           |                       |           |              |  |
| Clean and sanitize                     |                | Yes                       |                       |           |              |  |
| <b><i>LINENS</i></b>                   |                |                           |                       |           |              |  |
| Wash cloth napkins                     | Yes            |                           |                       |           |              |  |
| Wash tablecloths and placemats         | Yes if plastic |                           | Yes if cloth is dirty |           |              |  |
|  |                |                           |                       |           |              |  |
| Wash dishcloths                        |                |                           | Yes                   |           |              |  |
| Wash potholders                        |                |                           |                       | Yes       |              |  |
| <b><i>STORAGE AREAS</i></b>            |                |                           |                       |           |              |  |
| Wipe shelves, cabinets and drawers     |                |                           |                       | Yes       |              |  |

*Food borne disease reporting* is also very important for disease prevention and control. Typically, the appropriate procedure for health care professionals to follow in reporting foodborne illnesses is to **contact the local or state health department whenever a specific notifiable foodborne disease is suspected.**

The list of **Notifiable foodborne diseases** is shown below:

**Notifiable Bacterial food borne diseases and conditions**

- Anthrax
- Botulism
- Brucellosis
- Cholera
- Enterohemorrhagic *Escherichia coli* infection
- Hemolytic-uremic syndrome, post-diarrheal (*Escherichia coli*)
- Listeriosis
- Salmonellosis (other than *S.typhi*)
- Shigellosis
- Typhoid fever (*S. typhi* and *S. paratyphi* infections)

**Notifiable Viral foodborne diseases and conditions**

- Hepatitis A

**Notifiable Parasitic foodborne diseases and conditions**

- Cryptosporidiosis
- Cyclosporiasis
- Giardiasis
- Trichinellosis

## **PREVENTION: THE SCHOOL ENVIRONMENT**

### **CLEANING AND SANITIZING**

One of the most important steps in reducing the spread of infectious diseases in school settings among children and child care providers is the **cleaning** and **sanitizing** of surfaces that could possibly pose a risk to children or staff. **Cleaning** is the removal of adherent visible soil, dust or other foreign material by a manual or chemical process while **sanitizing** is the process that reduces the microbial population on an object to a safe level.

Routine **cleaning** with detergent and water is the most useful method for removing germs from surfaces in school setting. However, some items and surfaces require an additional step after cleaning to reduce the number of germs on a surface to a level that is unlikely to transmit disease. This step is called **sanitizing**. For example, in classrooms with young children, toys should be cleaned and sanitized regularly, especially if the toys are soiled or placed in a child's mouth. Common areas, desks/tables, doorknobs and handles, phone receivers, drinking fountains are examples of areas/items that should be kept clean and periodically sanitized.

The facility operations/custodial services staff are usually responsible for most of the cleaning that occurs in schools.

Sanitizer solutions can be applied in various ways:

- *Spray bottle* - for diaper changing surfaces, toilets and potty chairs
- *Cloths rinsed in sanitizing solution* - for food preparation areas, large toys, books and activity centers
- *Dipping the object into a container filled with the sanitizing solution* - for smaller toys

When the sanitizing solution is applied to a surface, proper instructions for that solution must be followed. For a sanitizing procedure to be effective, it is important to determine both the dilution of a sanitizer and minimum contact time.

In general, it is best not to rinse off the sanitizer or wipe the object dry right away. A sanitizer must be in contact with the germs long enough kill them. For example, when a properly prepared solution of **bleach water** is used from a spray bottle to previously cleaned and rinsed surfaces, **the minimum contact time is 2 minutes**.

For cleaned and rinsed dishes submerged in a container that is filled with properly prepared bleach solution, **the minimum contact time is 1 minute**.

Most facility operations/custodial services have some type of sanitizing solution available. Generally, a water solution of **unscented household chlorine bleach** is an appropriate sanitizer. It is effective, economical, convenient and readily available. The solution of bleach and water is easy to mix, nontoxic, safe if handled properly and kills most infectious agents. However, it should be used with caution on metal or metallic surfaces. If bleach is found to be corrosive on certain materials, a different sanitizer may be required. When ordering household bleach, make sure that the bleach concentration is for household use and not for industrial application. Household bleach is typically sold in retail stores in one of 2 strengths: 5.25% hypochlorite (regular strength bleach) or 6.00% hypochlorite (ultra strength bleach) solutions.

Cleaning and Sanitizing Sample Schedule is shown in the chart below:

***Sample Cleaning and Sanitizing Chart***

| Area/Item  | Clean | Sanitize | Frequency  | Comment  |
|--|-------|----------|--|--|
| <b>Classroom/Child Care/Food Areas</b>   |       |          |  |  |
| Countertops/tabletops, floors, doorknobs, cabinet handles  | Yes   | Yes      | Daily and when soiled  |  |
| Food preparation/service surfaces  | Yes   | Yes      | Before and after contact with food activity; between preparation of raw and cooked foods   |  |
| Carpets and large area rugs  | Yes   |          | Vacuum daily when children are not present.<br>Clean carpets at least <b>monthly</b> in infant areas, at least <b>every 3 months</b> in other areas and <b>when soiled</b> . | 1. Vacuum only when children are not present.<br>2. Clean carpets only when children will not present until carpet is dry.<br>3. Clean with a carpet-cleaning method approved by the local health authority. |
| Small rugs   | Yes   |          | Vacuum <b>daily</b> or shake outdoors.<br>Launder <b>weekly</b>  |  |
| Utensils, surfaces, toys that go in the mouth or have been in contact with saliva or other body fluids   | Yes   | Yes      | After each child's use   | Use one-time or disposable utensils and toys if possible   |
| Dress-up clothes not worn on the head, Washcloths, Sheets /pillow cases, individual cloth towels (if been used), Toys that are not contaminated with body fluids, Machine-washable cloth toys, Combs /hairbrushes. | Yes   |          | Weekly and when visibly soiled   | <b>(Warning! None of these items should be shared among children!)</b>   |
| Blankets, sleeping bags, cubbies   | Yes   |          | Monthly and when soiled  |  |
| Hats   | Yes   |          | After each child's use   | Use disposable hats if possible  |
| Cribs and crib mattresses  | Yes   |          | Weekly, before use by different child and whenever soiled or wet   |  |
| Phone receivers  | Yes   | Yes      | Weekly   |  |
| <b>Toilet and diapering areas</b>  |       |          |  |  |
| Handwashing sinks, faucets, surrounding counters, soap dispensers, door knobs  | Yes   | Yes      | Daily and when soiled  |  |
| Toilet seats, toilet handles, doorknobs or cubicle handles, floors   | Yes   | Yes      | Daily or immediately if visibly soiled   |  |
| Toilet bowls   | Yes   | Yes      |  |  |
| Changing tables, potty chairs  | Yes   | Yes      | After each child's use   | Use of potty chairs in child care is discouraged because of high risk of contamination   |
| <b>General Facility</b>  |       |          |  |  |
| Mops and cleaning rags   | Yes   | Yes      | Before and after a day of use.   | Wash mops and rags in detergent and warm water, rinse in water, immerse in sanitizing solution and wring as dry as possible. After cleaning and sanitizing hang mops and rags to dry.                        |
| Waste and diaper containers  | Yes   |          | Daily  |  |
| Any surface contaminated with body fluids (e.g. saliva, mucus, blood, urine, vomit, stool)   | Yes   | Yes      | Immediately  | Use standard precautions as specified in <i>Caring of our Children</i> , Standard 3.026  |

Adapted from: *Managing Infectious Diseases in Child Care and Schools, A quick Reference Guide*; Editors: Susan Aronson, Timothy R. Shope, American Academy of Pediatrics, 2005;  
*National Health and Safety Performance Standards, Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care*, Second Edition, Copyright 2002 by American Academy of Pediatrics American Public Health Association National Resource Center for Health and Safety in Child Care, p. 417 Appendix I



## **ANIMALS / PETS AT SCHOOL**

Animals in the classroom can be beneficial in the education process, however some animals can transmit infectious diseases to humans. For example, many animals, especially reptiles, shed *Salmonella* bacteria in their feces without being sick themselves. People can contaminate their hands with feces when they handle or clean up after the animal and disease can be spread through the fecal-oral route explained above. Some animals are not appropriate at all for the classroom. Poisonous animals like certain spiders, snakes and insects, wild, stray, or aggressive animals and animals from an unknown source should not be considered for presence in the school.

### **What are the best measures to prevent spread of disease from animals?**

To minimize the risk of students and staff acquiring an infectious disease from animals, simple precautions should be taken:

- The first step is not to utilize a species known to transmit diseases such as reptiles. Birds are also a poor choice because of psittacosis.
- Animal cages or enclosures should be kept clean and in good repair. If students assist in cleaning the cage(s), they should be supervised and should wash their hands afterwards.
- Students and staff should always wash their hands after any contact with animals and after visiting places with animals such as zoos or farms.
- All animals should be inspected prior to entering classrooms - ideally by a certified veterinarian.
- An effort should be made to minimize student handling of animals and then only by those students of sufficient mental maturity to follow directions.
- Disposable gloves (vinyl) should be worn.
- Frequent handwashing after handling animals and always before eating should be encouraged.
- "No fingers in the mouth" policy should be followed.
- Students should never "kiss" animals or have them in contact with their faces.
- Human food should not be allowed in a room where animals are kept.
- Checking for student allergies before bringing animals into the classroom is also a good idea.

## APPROPRIATE ANTIBIOTIC USE

Antibiotics are important medicines that fight infections caused by bacteria. However, some bacteria have developed resistance to these drugs. This occurred partially due to improper antibiotic use (misuse and overuse). Antibiotic-resistant infections may be more difficult to treat and may result in more serious illness.

While antibiotics are used for treatment of **bacterial** infections, they are not effective. Antibiotics should **not be used with viral** infections like the common cold, most sore throats, and influenza.

## SYMPTOMS OF ILLNESS

The role of schools in assessing the health of students is important. School personnel should be trained to monitor student's behavior and note any symptoms of illness. Some frequent symptoms and signs that may indicate illness are shown below.

### SYMPTOMS TO WATCH FOR

- Unusual or noticeable change in general appearance
- Unusual or noticeable change in behavior (student is cranky or less active than usual, won't eat, or seems unwell)
- Headache
- Fever
- Breathing trouble, runny nose
- Severe coughing (student gets red or blue in the face, makes high-pitched croupy or whooping sound after coughing, has coughing "fits", vomits after coughing)
- Pink eye (redness of eye; watering or discharge from the eye)
- Unusual skin color (e.g. yellowish skin or eyes)
- Unusual spots or rashes
- Infected skin sores (crusty, bright yellow, dry or moist areas of skin)
- Frequent scratching of the scalp or skin
- Loss of appetite
- Sore throat or trouble swallowing
- Vomiting
- Diarrhea (loosened and frequent stools)
- Gray or white stool
- Blood or mucus in the stool
- Dark, tea-colored urine

## SYMPTOM CHART

The following chart lists common symptoms seen in ill children that could possibly be related to an infectious disease. The chart also indicates if it is necessary to exclude a student exhibiting a particular symptom from school. Parents should be notified when a student develops symptoms at school, and the student should be referred to a health care provider if symptoms are thought to be serious.

As mentioned earlier in the introduction of these guidelines, exclusion should be considered with any illness or symptom if any of the following conditions exist:

- The student does not feel well enough to participate comfortably in usual school activities.
- The student requires more care than school personnel are able to provide.
- The student has a high fever, behavior changes, persistent crying, difficulty breathing, lack of energy, uncontrolled coughing, or other signs suggesting a severe illness.
- The student is ill with a potentially contagious illness and exclusion is recommended by a health care provider, the state or local public health agency, or these guidelines.

| <i><b>SIGN/SYMPTOM</b></i>   | <i><b>COMPLAINTS/OBSERVED SIGNS</b></i>   | <i><b>EXCLUSION CRITERIA*</b></i>   | <i><b>READMISSION CRITERIA</b></i>                                     |
|--|---|---|--|
| <b>Common Cold</b>   | <ul style="list-style-type: none"> <li>• Fever</li> <li>• Scratchy throat</li> <li>• Runny or stuffy nose</li> <li>• Sneezing</li> <li>• Coughing</li> <li>• Watery eyes</li> <li>• Conjunctivitis</li> </ul> | Fever accompanied by behavior change.<br>The person looks or acts very ill.<br>Breathing difficulty.<br>Existence of blood red or purple rash apparently not associated with trauma.  | Exclusion criteria are resolved.                                       |
| <b>Cough</b>   | <ul style="list-style-type: none"> <li>• Dry or productive cough, sometimes - barking cough</li> <li>• Runny or stuffy nose</li> <li>• Sore throat</li> <li>• Hoarse voice</li> </ul>                         | Rapid, forced or difficulty/change of breathing.<br>Severe, uncontrolled cough.<br>Cyanosis.<br>Wheezing.   | Exclusion criteria are resolved.                                       |
| <b>Diarrhea</b><br>(a condition when stools are more frequent and looser than usual)<br><br>See chart for specific disease | <ul style="list-style-type: none"> <li>• Fever</li> <li>• Sometimes - stomach ache or abdominal cramps</li> <li>• Vomiting</li> </ul>   | The person has other symptoms along with the diarrhea (such as vomiting, fever, abdominal pain, etc.).<br>The diarrhea cannot be contained in a toilet.<br>Presence of blood or mucus in the stool.<br>Stool color and smell change (very pale, all black or deep green). | When symptoms subside.<br>Stool is contained in diapers or the toilet. |
| <b>Earache</b>   |   | The person is unable to participate in school activities.<br>Needs more care than personnel can provide.  | Exclusion criteria are resolved.                                       |
| <b>Fever</b> (defined as a temperature over 101°F orally)  |   | Fever alone does not require exclusion.<br>Additional symptoms are present (such as a rash, sore throat, vomiting, diarrhea, etc.).   | Exclusion criteria are resolved.                                       |

|   |  |   |   |
|---|--|---|---|
| <b>Headache</b>                             | <ul style="list-style-type: none"> <li>• Unable to participate</li> <li>• Behavior change (tired or irritable)</li> <li>• May be accompanied by other symptoms (fever, nausea/vomiting, stiff neck etc.)</li> </ul>                | No exclusion is necessary for headache alone. Nevertheless, close observation should be exercised.  | Able to participate and exclusion criteria are resolved.  |
| <b>Mouth sores</b>                          | <ul style="list-style-type: none"> <li>• White or yellowish spots and patches in the mouth, on tongue or along the cheeks;</li> <li>• Painful swallowing, swollen neck glands or lips</li> </ul>                                   | The child is drooling uncontrollably. Needs more care than personnel can provide. Unable to participate.  | Able to participate and exclusion criteria are resolved.  |
| <b>Rash</b>                                 | See pages 20-21 for more information on rashes   | Symptoms in addition to the rash present (as behavior change, fever, joint pain, or bruising not associated with injury, or if the rash is oozing or causes open wounds).                                 | Able to participate and exclusion criteria are resolved. On medication (if indicated) at least for 24 hours.  |
| <b>Stomach ache / Abdominal pain</b>        | Pain in the abdomen. May be accompanied by other symptoms and complaints (fever, nausea, vomiting and/or diarrhea, abdominal cramps etc.)  | Pain is severe. Pain appears after an injury. Other symptoms in addition to the stomachache are present (such as vomiting, fever, diarrhea, etc.).  | Able to participate and exclusion criteria are resolved.  |
| <b>Swollen lymph nodes (Swollen Glands)</b> | <ul style="list-style-type: none"> <li>• Swelling at front and/or sides of neck;</li> <li>• Fever</li> <li>• Common cold symptoms</li> <li>• Swollen lymph nodes in groin or armpits, boils or redness, pain and warmth</li> </ul> | Symptoms in addition to the swollen glands present (such as difficulty breathing or swallowing, fever, etc).  | Able to participate and exclusion criteria are resolved. On medications (if indicated) at least for 24 hours. |
| <b>Vomiting</b>                             | <ul style="list-style-type: none"> <li>• Nausea</li> <li>• Abdominal pain</li> <li>• Diarrhea</li> <li>• Vomiting</li> <li>• Cramping</li> </ul>   | Vomiting occurred more than two times in 24 hours. The vomit appears green or bloody. Associated with recent head injury. There are symptoms in addition to the vomiting (such as fever, diarrhea, etc.). | Able to participate and exclusion criteria are resolved.  |

\* most minor illnesses (e.g. rash without fever, nonpurulent conjunctivitis, Hepatitis B virus carrier etc.) do not require child's exclusion from the school setting.

## **RASHES**

A rash is a temporary eruption or change in the color of the skin that is often inflamed or swollen. Rashes come in many forms and levels of severity; they last for different amounts of time and can have many different causes.

Generally, a rash can be a symptom either of a contagious or non-contagious disease:

- **Contact dermatitis** (an inflammation of the skin caused by direct contact with an irritating substance) can occur following an exposure to dyes and chemicals found in clothing, chemicals found in elastic and rubber products, cosmetics, poison ivy and poison oak. This type of rash usually occurs where the irritating agent touches the skin.
- **Eczema** (a chronic hypersensitivity reaction in the skin) can cause a scaly and itchy rash.
- Medications, foods, or insect bites that cause **allergic reactions (allergic dermatitis)** can also cause a rash.
- The table below outlines 12 different **illnesses** that can cause rashes:

| <b>DISEASE</b>  | <b>APPEARANCE</b>   | <b>DISTRIBUTION</b>                                  | <b>ITCHING</b> | <b>COMMENTS/EXCLUSION</b>  |
|---|---|--|----------------|--|
| <b>Chickenpox</b> - viral (Varicella)   | Blister-like rash that scabs over.  | More abundant on trunk than extremities.             | Yes            | Highly contagious. Immunization available. Exclude until blisters scab over.         |
| <b>Duke's Disease</b> - viral (Enterovirus, ECHO- and Coxsackieviruses, Fourth Disease)                   | Flat to bumpy red rash with areas of confluence. May look like hives, blisters or red spots under the skin. | Usually generalized; occasionally palms and soles.   | Sometimes      | No exclusion necessary   |
| <b>Fifth Disease</b> – viral (Erythema Infectiosum, Human Parvovirus)                                     | Red cheeks (“slapped cheek”). Red, lace-like rash. May fade and then reappear.                              | Begins on cheeks, spreads to trunk and extremities.  | Slight, if any | No exclusion necessary   |
| <b>Hand-Foot-Mouth Disease</b> –viral (Viral Exanthem)  | Small blister-like sores  | Hands, feet, mouth and occasionally buttocks.        | No             | No exclusion necessary   |
| <b>Impetigo</b> – bacterial   | Small blisters that burst to reveal red skin.   | Usually the face, but can occur anywhere.            | Yes            | Exclude until 24 hours of appropriate treatment.                                     |
| <b>Measles</b> – viral (Rubeola, Hard Measles, 14-day measles, Morbilli)                                  | Bumpy, blotchy red to purplish rash. Rash turns white on pressure.  | Begins on face, spreads to trunk and extremities.    | Slight, if any | Highly contagious. Immunization is available. Exclude for 5 days after rash onset.   |
| <b>Ringworm</b> – fungal (Tinea)  | Small red bump that spreads outward.  | A single area of skin.                               | Yes            | Exclude from the end of the day until after the first treatment.                     |
| <b>Roseola</b> – viral (Sixth Disease, Exanthem Subitum, Sudden Rash", Rose Rash of Infants, 3-day fever) | Small, discrete pink spots. Almond shaped flat spots appear on trunk and neck.                              | Begins on chest and abdomen, spreads to entire body. | No             | Most common in children 6 to 24 months of age. No exclusion necessary in most cases. |

|  |  |  |                            |   |
|--|--|--|----------------------------|---|
| <b>Rubella - viral</b><br>(German Measles)                           | Small pink spots. May become confluent but remains pink.                       | Begins on face, spreads to neck, trunk and extremities.            | No                         | Immunization is available. Exclude for 7 days after rash onset.                       |
| <b>Scarlet fever – bacterial</b> ( Group A streptococci, Scarlatina) | Small red bumps. Red turns white on pressure. Pigmented areas in skin creases. | Begins on neck and groin, spreads to rest of body.                 | No                         | Strep throat symptoms are present. Exclude until 24 hours of appropriate treatment.   |
| <b>Scabies</b>   | Small, scattered, red itchy spots.   | Mostly in the web of the fingers and areas of the thighs and arms. | Yes. Most severe at night. | Exclude until the day after treatment.  |
| <b>Shingles – viral</b><br>(Herpes Zoster)                           | Blister-like rash that scabs over. Painful in affected area.                   | A single area of skin.   | Sometimes.                 | Reactivation of the chickenpox virus. No exclusion necessary if blisters are covered. |

### Skin Rashes: Diseases 1-6

| Number         | Other names for the disease  | Etiology(ies)                 | Web-links to descriptions ( <a href="#">see below</a> )/Image   |
|----------------|--|-------------------------------|---|
| First disease  | Rubeola, <b>Measles</b> , Hard measles, 14-day measles, Morbilli                             | Measles virus                 | <a href="#">Description</a> , <a href="#">Images</a> , <a href="#">Illustration</a>   |
| Second disease | <b>Scarlet Fever</b> , Scarlatina  | <i>Streptococcus pyogenes</i> | <a href="#">Description</a> , Images ( <a href="#">sandpaper like rash</a> , <a href="#">illustration</a> , <a href="#">strawberry tongue</a> ) |
| Third disease  | <b>Rubella</b> , German measles, 3-day measles   | Rubella virus                 | <a href="#">Description</a> , <a href="#">Images</a> , <a href="#">Illustration</a>   |
| Fourth disease | <b>Duke's Disease</b> , "viral rash", <b>most common viral rash</b>                          | Coxsackievirus or Echovirus   | <a href="#">Description</a> , <a href="#">Images</a>  |
| Fifth disease  | <b>Erythema infectiosum</b>  | Parvovirus B19                | <a href="#">Description</a> , <a href="#">Images</a> , <a href="#">rash</a>   |
| Sixth disease  | Exanthem subitum, <b>Roseola infantum</b> , "Sudden Rash", rose rash of infants, 3-day fever | Human Herpes Virus 6          | <a href="#">Description</a> , <a href="#">Images</a>  |

## **Reference/Resources:**

1. <http://www.schoolnurse.com/library.html>
2. <http://nrc.uchsc.edu/CFOC/index.html>
3. <http://www.cdc.gov/ncidod/dbmd/diseaseinfo/foodbornedisease>
4. *Norovirus and Food borne Disease, United States, 1991–2000*; Marc-Alain Widdowson, Alana Sulka, Sandra N. Bulens, R. Suzanne Beard, Sandra S. Chaves, Roberta Hammond, Ellen D.P. Salehi, Ellen Swanson, Jessica Totaro, Ray Woron, Paul S. Mead, Joseph S. Bresee, Stephan S. Monroe and Roger I. Glass; *Emerging Infectious Diseases*, www.cdc.gov/eid, Vol. 11, No. 1, January 2005, National Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia, USA, 2004  
<http://www.cdc.gov/ncidod/EID/vol11no01/pdfs/Vol11No1.pdf>
5. <http://www.fightbac.org/foursteps.cfm>
6. <http://www.foodsafeschools.org/foodSvcSafety/start.cfm>
7. <http://peaches.nal.usda.gov/foodborne/fbindex/Schools.asp>
8. [http://www.cdphe.state.co.us/dc/epidemiology/dc\\_guide.html](http://www.cdphe.state.co.us/dc/epidemiology/dc_guide.html)
9. <http://www.cdc.gov/flu/professionals/infectioncontrol/childcaresettings.htm>
10. Morbidity and Mortality Weekly Report (MMWR), *Recommendations and Reports*, April 16, 2004 / Vol. 53 / No. RR-4  
<http://www.cdc.gov/mmwr/PDF/rr/rr5304.pdf>
11. *National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care*, Second Edition, 2002, p. 417, Appendix I  
<http://nrc.uchsc.edu/CFOC/PDFVersion/National%20Health%20and%20Safety%20Performance%20Standards.pdf>
- 12.. *Making food healthy and safe for children: How to meet the national health and safety performance standards*, Graves, D.E., Suitor, C.W., & Holt, K.A. eds -- Guidelines for out-of-home child care programs; Arlington, VA, National Center for Education in Maternal and Child Health; 1997
13. *National Health and Safety Performance Standards, Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care*, Second Edition, Copyright 2002 by American Academy of Pediatrics, American Public Health Association National Resource Center for Health and Safety in Child Care, p. 417 Appendix I
14. American Academy of Pediatrics, *Red Book: 2003 Report of the Committee on Infectious Diseases*. Pickering LK, ed. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003
15. *Managing Infectious Diseases in Child Care and Schools, A quick Reference Guide*; Editors: Susan Aronson, Timothy R. Shope, American Academy of Pediatrics, 2005





# **APPENDIX 1**

## **INTERNET LINKS TO SELECTED COMMUNICABLE DISEASES**

| <b>DISEASE</b>  | <b>Link to LA OPH Web page</b>  | <b>Link to LA CDC Web page</b>  | <b>Link to images</b>   |
|---|---|---|---|
| <b>AIDS</b> (acquired immunodeficiency syndrome)  | <a href="http://www.oph.dhh.louisiana.gov/hiv aids/prevention/index.html">http://www.oph.dhh.louisiana.gov/hiv aids/prevention/index.html</a>   | <a href="http://www.cdc.gov/ncidod/hip/Blood/hiv.htm#1">http://www.cdc.gov/ncidod/hip/Blood/hiv.htm#1</a>           | <a href="http://www.iapac.org/home.asp?pid=77&amp;toolid=2&amp;itemid=3443">http://www.iapac.org/home.asp?pid=77&amp;toolid=2&amp;itemid=3443</a>   |
| <b>CHICKENPOX</b> (varicella)   | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/VaricellaZosterManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/VaricellaZosterManual.pdf</a> | <a href="http://www.cdc.gov/ncidod/diseases/list_varicl.htm">http://www.cdc.gov/ncidod/diseases/list_varicl.htm</a> | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=varicella&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=varicella&amp;btnG=Search</a>                                   |
| <b>CMV INFECTION</b> (cytomegalovirus – herpesvirus group)  | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/Epiman02/June_04%20revisions/CMVManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/Epiman02/June_04%20revisions/CMVManual.pdf</a>     | <a href="http://www.cdc.gov/ncidod/diseases/cmv.htm">http://www.cdc.gov/ncidod/diseases/cmv.htm</a>                 | <a href="http://images.google.com/images?q=cytomegalovirus+infection&amp;hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla:en-US:official&amp;start=0&amp;sa=N">http://images.google.com/images?q=cytomegalovirus+infection&amp;hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla:en-US:official&amp;start=0&amp;sa=N</a> |
| <b>COMMON COLD</b> (upper respiratory infections caused by a variety of viruses- rhinoviruses, adenoviruses). Can be caused by bacterial agents (such as Group A streptococcus - pharyngotonsillitis) |   |   | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=common+cold&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=common+cold&amp;btnG=Search</a>                               |

|   |   |  |   |
|---|---|--|---|
| <b>DIARRHEAL DISEASES</b> (caused by Salmonella, Shigella, E.coli O157:H7, Campylobacter, Cryptosporidium, rotaviruses) | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/SalmonellaManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/SalmonellaManual.pdf</a>                     | <a href="http://www.cdc.gov/ncidod/diseases/submenus/sub_salmonella.htm">http://www.cdc.gov/ncidod/diseases/submenus/sub_salmonella.htm</a><br><br><a href="http://www.cdc.gov/ncidod/dvrd/revb/gastro/faq.htm">http://www.cdc.gov/ncidod/dvrd/revb/gastro/faq.htm</a> | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=diarrhea+&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=diarrhea+&amp;btnG=Search</a>                                       |
| <b>ENTEROBIASIS</b> (pinworm)   |   | <a href="http://www.cdc.gov/ncidod/dpd/parasites/pinworm/default.htm">http://www.cdc.gov/ncidod/dpd/parasites/pinworm/default.htm</a>  | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=enterobiasis&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=enterobiasis&amp;btnG=Search</a>                                 |
| <b>ERYTHEMA INFECTIOSUM</b> (Fifth disease)   | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/ErythemaInfectiosumManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/ErythemaInfectiosumManual.pdf</a>   | <a href="http://www.cdc.gov/ncidod/dvrd/revb/respiratory/parvo_b19.htm">http://www.cdc.gov/ncidod/dvrd/revb/respiratory/parvo_b19.htm</a>  | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=fifth+disease&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=fifth+disease&amp;btnG=Search</a>                               |
| <b>GIARDIASIS</b> (Giardia lamblia parasite)  | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/GiardiasisManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/GiardiasisManual.pdf</a>                     | <a href="http://www.cdc.gov/ncidod/dpd/parasites/giardiasis/default.htm">http://www.cdc.gov/ncidod/dpd/parasites/giardiasis/default.htm</a>  | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=giardia+lamblia&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=giardia+lamblia&amp;btnG=Search</a>                           |
| <b>HAND-FOOT-AND-MOUTH DISEASE</b> (Strains of Enteroviruses - Coxsackievirus disease)                                  | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/HandFootMouthDiseaseManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/HandFootMouthDiseaseManual.pdf</a> | <a href="http://www.cdc.gov/ncidod/dvrd/revb/enterovirus/hfhf.htm">http://www.cdc.gov/ncidod/dvrd/revb/enterovirus/hfhf.htm</a>  | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=HAND-FOOT-AND-MOUTH+DISEASE+&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=HAND-FOOT-AND-MOUTH+DISEASE+&amp;btnG=Search</a> |
| <b>HEPATITIS A</b>  | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/HepatitisAManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/HepatitisAManual.pdf</a>                     | <a href="http://www.cdc.gov/ncidod/diseases/hepatitis/index.htm">http://www.cdc.gov/ncidod/diseases/hepatitis/index.htm</a>  | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=hepatitis+A&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=hepatitis+A&amp;btnG=Search</a>                                   |

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| <b>HEPATITIS B</b><br>Immunization<br>Required by Law for<br>Day Care Center<br>Children by Fall<br>1998) | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/Epiman02/June_04%20revisions/HepatitisBManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/Epiman02/June_04%20revisions/HepatitisBManual.pdf</a>       | <a href="http://www.cdc.gov/ncidod/diseases/hepatitis/b/index.htm">http://www.cdc.gov/ncidod/diseases/hepatitis/b/index.htm</a>                         | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=hepatitis+B&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=hepatitis+B&amp;btnG=Search</a>                 |
| <b>IMPETIGO<br/>CONTAGIOSA</b><br>(Staphylococcal or<br>Streptococcal<br>infections)                      | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/StreptococcalInfectionsManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/StreptococcalInfectionsManual.pdf</a> | <a href="http://www.cdc.gov/ncidod/dbmd/diseaseinfo/groupastreptococcal_g.htm">http://www.cdc.gov/ncidod/dbmd/diseaseinfo/groupastreptococcal_g.htm</a> | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=impetigo+contagiosa&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=impetigo+contagiosa&amp;btnG=Search</a> |
| <b>INFECTIOUS<br/>MONONUCLEOSIS</b><br>(Epstein-Barr<br>Virus Infection)                                  | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/MononucleosisManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/MononucleosisManual.pdf</a>                     | <a href="http://www.cdc.gov/ncidod/diseases/ebv.htm">http://www.cdc.gov/ncidod/diseases/ebv.htm</a>   | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=mononucleosis&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=mononucleosis&amp;btnG=Search</a>             |
| <b>INFLUENZA</b><br>(influenza virus type<br>A, B, C)   | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/InfluenzaManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/InfluenzaManual.pdf</a>                             | <a href="http://www.cdc.gov/flu/">http://www.cdc.gov/flu/</a>   | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=influenza+virus&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=influenza+virus&amp;btnG=Search</a>         |
| <b>MEASLES</b><br>(Rubeola)<br>Immunization<br>Required by Law  | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/MeaslesManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/MeaslesManual.pdf</a>                                 | <a href="http://www.cdc.gov/nip/diseases/measles/default.htm">http://www.cdc.gov/nip/diseases/measles/default.htm</a>                                   | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=measles&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=measles&amp;btnG=Search</a>                         |

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| <b>MENINGITIS &amp; INVASIVE DISEASE</b><br>(meningococcal)   | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/MeningoMeningitisManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/MeningoMeningitisManual.pdf</a>       | <a href="http://www.cdc.gov/ncidod/dbmd/diseaseinfo/meningococcal_g.htm">http://www.cdc.gov/ncidod/dbmd/diseaseinfo/meningococcal_g.htm</a>   | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=meningococcal+meningitis+&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=meningococcal+meningitis+&amp;btnG=Search</a><br><br><a href="http://www.vaccineinformation.org/menin/photos.asp">http://www.vaccineinformation.org/menin/photos.asp</a> |
| <b>MENINGITIS &amp; INVASIVE DISEASE</b><br>( <i>Haemophilus influenzae</i> type b)                                     | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/HemophilusInfluenzaeManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/HemophilusInfluenzaeManual.pdf</a> | <a href="http://www.cdc.gov/ncidod/dbmd/diseaseinfo/haeminfluserob_t.htm">http://www.cdc.gov/ncidod/dbmd/diseaseinfo/haeminfluserob_t.htm</a> | <a href="http://images.google.com/images?ie=UTF-8&amp;q=Haemophilus+influenzae">http://images.google.com/images?ie=UTF-8&amp;q=Haemophilus+influenzae</a>  |
| <b>MENINGITIS &amp; INVASIVE DISEASE</b><br>(bacterial)<br><i>Streptococcus pneumoniae</i><br>(Pneumococcal meningitis) | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/MeningitisManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/MeningitisManual.pdf</a>                     | <a href="http://www.cdc.gov/nip/diseases/Pneumo/vac-chart.htm">http://www.cdc.gov/nip/diseases/Pneumo/vac-chart.htm</a>                       | <a href="http://www.drkoop.com/ency/article/000607.htm">http://www.drkoop.com/ency/article/000607.htm</a>  |
| <b>MUMPS</b> (Epidemic Parotitis)   | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/MumpsManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/MumpsManual.pdf</a>                               | <a href="http://www.cdc.gov/nip/diseases/mumps/default.htm">http://www.cdc.gov/nip/diseases/mumps/default.htm</a>                             | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=mumps&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=mumps&amp;btnG=Search</a>  |
| <b>PEDICULOSIS</b><br>(Head Lice)   | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/PediculosisManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/PediculosisManual.pdf</a>                   | <a href="http://www.cdc.gov/ncidod/dpd/parasites/lice/default.htm">http://www.cdc.gov/ncidod/dpd/parasites/lice/default.htm</a>               | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=pediculosis&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=pediculosis&amp;btnG=Search</a>  |

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| <b>PERTUSSIS</b><br>(Whooping Cough)   | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/PertussisManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/PertussisManual.pdf</a>       | <a href="http://www.cdc.gov/doc.do/id/0900f3ec80228696">http://www.cdc.gov/doc.do/id/0900f3ec80228696</a>   | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=pertussis&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=pertussis&amp;btnG=Search</a>  |
| <b>RINGWORM</b> (Tinea capitis infection)  | <a href="http://www.cdc.gov/healthypets/diseases/ringworm.htm">http://www.cdc.gov/healthypets/diseases/ringworm.htm</a>   | <a href="http://www.cdc.gov/healthypets/diseases/ringworm.htm">http://www.cdc.gov/healthypets/diseases/ringworm.htm</a>                           | <a href="http://images.google.com/images?q=ringworm&amp;hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla:en-US:official&amp;sa=N&amp;tab=ii&amp;oi=imagest">http://images.google.com/images?q=ringworm&amp;hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla:en-US:official&amp;sa=N&amp;tab=ii&amp;oi=imagest</a>  |
| <b>RUBELLA</b> (German Measles)  | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/RubellaManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/RubellaManual.pdf</a>           | <a href="http://www.cdc.gov/nip/menus/diseases.htm#rubella">http://www.cdc.gov/nip/menus/diseases.htm#rubella</a>                                 | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=rubella&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=rubella&amp;btnG=Search</a>  |
| <b>SCABIES</b> (Itch)  | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/ScabiesManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/ScabiesManual.pdf</a>           | <a href="http://www.cdc.gov/ncidod/dpd/parasites/scabies/default.htm">http://www.cdc.gov/ncidod/dpd/parasites/scabies/default.htm</a>             | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=scabies&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=scabies&amp;btnG=Search</a>  |
| <b>STREPTOCOCCAL INFECTION</b><br>(Including <i>Scarlet Fever</i> And <i>Streptococcal Sore Throat</i> ) | <a href="http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/StreptoGroupManual.pdf">http://www.oph.dhh.louisiana.gov/infectiousdisease/docs/disease_updates_04/StreptoGroupManual.pdf</a> | <a href="http://www.cdc.gov/ncidod/diseases/submenus/sub_streptococcus.htm">http://www.cdc.gov/ncidod/diseases/submenus/sub_streptococcus.htm</a> | <a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=scarlet+fever&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=scarlet+fever&amp;btnG=Search</a><br><br><a href="http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=strep+throat&amp;btnG=Search">http://images.google.com/images?hl=en&amp;lr=&amp;client=firefox-a&amp;rls=org.mozilla%3Aen-US%3Aofficial&amp;q=strep+throat&amp;btnG=Search</a> |

## **APPENDIX 2**

### **COMMUNITY RESOURCES**

In your community, there are many people who can help you provide nutrition education and nutritious and safe food to the children. Use the spaces below to write down the telephone numbers for your community resources.

| <b>PROGRAM/PERSON</b>   | <b>TELEPHONE NUMBER</b> |
|---|-------------------------|
| Local Health Department .....   | _____                   |
| Child and Adult Care Food Program .....   | _____                   |
| Expanded Food and Nutrition Education Program (EFNEP) .....                     | _____                   |
| Nutrition Education and Training (NET) Program .....                            | _____                   |
| Head Start Program .....  | _____                   |
| Community College Dietary Technician Program .....                              | _____                   |
| Cooperative Extension Service .....   | _____                   |
| Child Care Nutrition Specialist .....   | _____                   |
| WIC Nutritionist .....  | _____                   |
| Local Sanitation Inspector .....  | _____                   |
| Registered Dietitian (working in local hospital or community health program) .. | _____                   |
| University Extension Food and Nutrition Specialist .....                        | _____                   |
| Home Economics/Family Life Teacher .....  | _____                   |

In addition to these community resources, here are some telephone numbers for national hotlines where you can get help:

**USDA Meat and Poultry Hotline** (for information about food handling) .....1(800) 535-4555  
10-4 weekdays Eastern time

**ADA Consumer Nutrition Hotline** .....1(800) 366-1655

**FDA Seafood Hotline** .....1(800) 332-4010  
12-4 weekdays Eastern time